UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,403	08/23/2006	Dae-Ok Rhee	P/2292-110	8686
	7590 01/21/201 FABER GERB & SOF	EXAMINER		
1180 AVENUE OF THE AMERICAS			BRADFORD, CANDACE L	
NEW YORK, NY 100368403			ART UNIT	PAPER NUMBER
			3634	
			MAIL DATE	DELIVERY MODE
			01/21/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)					
	10/590,403	RHEE, DAE-OK					
Office Action Summary	Examiner	Art Unit					
	CANDACE L. BRADFORD	3634					
The MAILING DATE of this communication app	ears on the cover sheet with the c	orrespondence address					
Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1)⊠ Responsive to communication(s) filed on <u>04 No</u>	ovember 2009.						
	action is non-final.						
·=							
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>1-19</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-19</u> is/are rejected.							
7) Claim(s) is/are objected to.	7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.						
Application Papers							
9) The specification is objected to by the Examine	r.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) ☐ All b) ☐ Some * c) ☐ None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
Attach mant/a)							
Attachment(s)  1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ate					
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 10/7/09.	5)  Notice of Informal P 6) Other:	atent Application					

## **DETAILED ACTION**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. What shape is defined by 'capsular'? Capsules come in numerous shapes—pill capsules, space capsules, etc.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jennings (3768467) in view of Anderson (4270628). Jennings discloses an air tube having an accommodation space for an evacuee 16, as best seen in Figure 4, and for protecting the evacuee from an external impact, wherein the air tube is formed in a shape to encapsulate the evacuee in the accommodation space, but fails to disclose a rope connected to the air tube, having one end fixed to an evacuation place, and having a length long enough to reach tire ground, and a controller mounted in the air tube and connected to the rope, for descending the air tube in which the evacuee is

accommodated to the ground at a safe speed. Anderson teaches the utility of a rope 6, attached to an escape area 4, having one end fixed to an evacuation place and having a length long enough to reach the ground, a controller 8, mounted in the escape area connected to the rope via tubes 5, for descending the air tube in which the evacuee is accommodated to the ground at a safe speed. The use of an air cushioned rope mounted escape area is commonly used in the art to repel evacuee's to the ground at a safe and constant speed while protecting them from external objects the apparatus may come into contact with. Therefore it would have been obvious to one of ordinary skill in the art to cover and attach air tube of Jennings to evacuation device of Anderson so as to repel evacuee's to the ground at a safe and constant speed while protecting them from external object the apparatus comes into contact with.

It has been held that the recitation that an element is "for" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138./

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jennings (3768467) in view of Anderson (4270628). Jennings further discloses the apparatus of claim 1, wherein the air tube comprise an external member formed as a capsular shape, and an internal member having a gas filling space between the external member and having a space therein for accommodating the evacuee, as recited in column 3, lines 40-45.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jennings (3768467) in view of Anderson (4270628). Jennings further discloses the apparatus of claim 2, wherein a width between the external member and the internal member is formed to be 10-15 cm, as best seen in Figure 4.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jennings (3768467) in view of Anderson (4270628) in further view of Woodland (5597335).

Jennings in view of Anderson as advanced above fails to disclose the air tube being made of a fireproof material. Woodland teaches the utility of an evacuation device having an air tube being made out of a fireproof material. Fire proof materials being used in emergency escape devices are commonly used in the art to allow evacuation device and their components to still function and not catch fire when exposed to fire.

Therefore, it would have been obvious to one of ordinary skill in the art to provide the evacuation device of Jennings in view of Anderson with a fire proof air tube as taught by Woodland so as to allow evacuation device and their components to still function and not catch fire when exposed to fire

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jennings (3768467) in view of Anderson (4270628). Jennings further discloses the apparatus of claim 1, wherein an entry for allowing the evacuee to enter the air tube is formed at a lateral surface of the air tube in a longitudinal direction, and the entry is provided with a zipper 14, for opening and closing the entry.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jennings (3768467) in view of Anderson (4270628) in view of Hodara (20050042956). Jennings

in view of Anderson discloses the apparatus of claim 1, a zipper 14, provided at an opening, wherein a pair of arm openings, for allowing the evacuee's arms to extend outward, and an opening for an evacuee's legs to extend outward, as best seen in Figure 8, but fails to disclose a pair of leg openings and a zipper is respectively provided at the arm openings and the leg openings. Hodara teaches the utility of life saving device having a pair or leg openings. The use of leg opening is commonly used in the art to allow the user to be as mobile as possible to be able to get to safety. It is commonly known in the art for openings to have closures such as zippers to provide protection against outside elements. Therefore, it would have been obvious to one of ordinary skill in the art to provide the escape device of Jennings in view of Anderson with leg opening as taught by Hodara so as to allow the user to be as mobile as possible to be able to get to safety and to provide protection against outside elements.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jennings (3768467) in view of Anderson (4270628). Jennings further discloses the apparatus of claim 1, wherein a transparent window for allowing the evacuee to see outside when the evacuee is accommodated in the air tube is formed at a front surface of the air tube, and the transparent window is provided with an opening and closing member for opening and closing the transparent window. It should be noted that since the entire air tube is transparent the examiner has interpreted the entire tube to be a transparent window.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jennings (3768467) in view of Anderson (4270628). Anderson further discloses the apparatus of

claim 1, wherein a controller mounting portion 8, for mounting the controller is formed at a front inner surface of the air tube, and rope guiding pipes 5, connected to the controller and for passing the rope are respectively mounted at upper and lower ends of the controller mounting portion.

It has been held that the recitation that an element is "for" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138./

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jennings (3768467) in view of Anderson (4270628) in view of Petzl et. al. (5054577). Jennings in view of Anderson as advanced above discloses the apparatus of claim 8, wherein a rope passage 5 for passing the rope is respectively formed at upper and lower ends of the controller but fails to disclose a lever adjusted by the evacuee inside the air tube is mounted at a front side of the controller. Petzl et. al. teaches the utility of a lever 34, used to control the jamming and unjamming of the rope 24. The use of a lever is commonly used in the art to allow for the user of a descending evacuation device to manually control the rate of speed to descend to the ground and allows the used to stop the dissension of the apparatus when desired. Therefore it have been obvious to one of ordinary skill in the art to provide the controller of Jennings in view of Anderson with a lever as taught by Petzl et. al. so as to manually control the rate of speed to descend to the ground and allows the used to stop the dissension of the apparatus when desired.

It has been held that the recitation that an element is "for" performing a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138./

Page 7

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jennings (3768467) in view of Anderson (4270628). Anderson further discloses the apparatus of claim 1, wherein the rope 6, has a length long enough to reach the ground from each floor, and a connection ring/cable feed (not shown) for fixing the rope to a fixed object is respectively mounted at both ends of the rope, as recited in column 2, lines 48-51,

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Jennings (3768467) in view of Anderson (4270628) in view of Wright (5820432).

Jennings in view of Anderson as advanced above fails to disclose a gas filling space of the air tube. Wright teaches the utility of a gas tank 27, mounted at one side of the air tube 25, and for storing compression gas to be supplied to the gas filling space of the air tube. The use of a gas tubes are commonly known in the art to store gas and fill an air tube. Therefore it would be obvious to one of ordinary skill in the art to provide the evacuation device of Jennings in view of Anderson with gas tank as taught by Wright so as to store gas and fill an air tube

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Jennings (3768467) in view of Anderson (4270628) in view of Wright (5820432). Wright further discloses the apparatus of claim 11, wherein the gas tank 27, is mounted at a

tank mounting portion mounted at a floor/bottom surface of the accommodation space of the air tube 2513.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jennings (3768467) in view of Anderson (4270628) in view of Wright (5820432). Wright further discloses the apparatus of claim 11, wherein a gas outlet of the gas tank 27, is connected to the air tube by a gas supplying pipe, and the gas outlet is provided with an opening and closing valve 30, for opening and closing the gas outlet

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Jennings (3768467) in view of Anderson (4270628) in view of Kim (4970354). Jennings in view of Anderson as advanced above fails to an air bag. Kim teaches the utility of an air bag 14, in stalled in an inner surface 16. The use of air bags are commonly used in the art to deploy and protect an occupant of an apparatus from impact. Therefore, it would have been obvious to one of ordinary skill in the art to provide the evacuation device of Jennings in view of Anderson with an air bag as taught by Kim so as to deploy and protect an occupant of an apparatus from impact

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jennings (3768467) in view of Anderson (4270628) in view of Kim (4970354). Kim further discloses the air bag instantaneously inflating upon impact by use of detection portions/signals, as recited in column 3, lines 32-38.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jennings (3768467) in view of Anderson (4270628) in view of Mutaguchi et. al. (5960718). Jennings in view of Anderson as advanced above fails to disclose an air

resistance portion. Mutaguchi teaches the utility of an air resistance portion 13, as recited in column 5, lines 32-39. The use of an air resistance portion is commonly used in the art to prevent a gust of wind from flipping or overturning of apparatuses that are suspended in the air. Therefore, it would have been obvious to one of ordinary skill in the art to provide the evacuation device of Jennings in view of Anderson with an air resistance portion as taught by Mutaguchi et. al. so as to prevent a gust of wind from flipping or overturning the apparatus when it is suspended in the air.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jennings (3768467) in view of Anderson (4270628) in view of Mutaguchi et. al. (5960718). Mutaguchi et. al. further discloses a propeller (not shown) affixed to supporting rod 12, rotatably mounted at the supporting axis, as recited in column 14, lines 54-60b.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Jennings (3768467) in view of Anderson (4270628) in view of Mutaguchi et. al.

(5960718) in further view of Wright (4938435). Jennings in view of Anderson in view of Mutaguchi et. al. as advanced above fails to disclose air tubes. Wright teaches the utility of air bars 27, 28, 35, at an upper side of the air tube 25, as best seen in Figure 2. The use of multiple air tubes is commonly used in the art to supply air to the air tube.

Therefore, it would have been obvious to one of ordinary skill in the art to provide the evacuation device of Jennings in view of Anderson in view of Mutaguchi et. al. with multiple air bars as taught by Wright, so as to supply air to the air tube.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jennings (3768467) in view of Anderson (4270628) in view of Pourchet (3156442). Jennings in view of Anderson as advanced above fails to disclose impact absorbing protrusions. Pourchet teaches the utility of buffering protrusions 6,7 for absorbing an impact, as recited in column 1, line 24 when the air tube collides with the ground or a wall surface at an outer circumferential surface thereof. The use a device to absorb the shock of an impact are commonly used in the art to protect the user of an evacuation device from injury caused by the impact of hitting a wall or the ground. Therefore, it would have been obvious to one of ordinary skill in the art to provide the emergency apparatus of Jennings in view of Anderson with impact absorbing protrusions as taught by Pourchet so as to protect the user of an emergency device from injury caused by the impact of hitting a wall or the ground.

## Response to Arguments

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CANDACE L. BRADFORD whose telephone number is (571)272-8967. The examiner can normally be reached on 9am until 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Katherine Mitchell can be reached on (571) 272-7069. The fax phone

Application/Control Number: 10/590,403 Page 11

Art Unit: 3634

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KATHERINE MITCHELL/ Supervisory Patent Examiner, Art Unit 3634

Candace L. Bradford Patent Examiner Art Unit 3634 January 7, 2010